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## PATENT SPECIFICATION



*Application Date: Dec. 14, 1925. No. 14,460 / 27.*

**272,836**

*Complete Left: April 27, 1926.*

*Complete Accepted: June 13, 1927.*

### PROVISIONAL SPECIFICATION.

#### Improvements in Imitation Fires.

We, JOHN CHARLES WHITE, of 49, Bridge Street, Deansgate, Manchester, and HUBERT ASHLEY DICKINSON, of 187, Cross Street, Sale, Manchester, in the County of Lancaster, both British subjects, do hereby declare the nature of this invention to be as follows:—

The present invention relates to improvements in imitation fires usually known as "electric fires", "gas fires" and the like.

Various types of electric heat radiating devices are in general use in which radiating elements are provided for the radiation of heat energy in combination with a device to produce the semblance of a flickering coal fire.

An object of the present invention is to provide an arrangement in which the flickering will be as irregular as possible to avoid any semblance of mechanical control to the eye of an observer.

According to the present invention plates or pieces of translucent glass having an irregular surface which may be coloured, but are preferably colourless, are interposed in the light path.

The glass used may be for instance. of rolled sheet pattern window glass which has a wavy or corrugated surface. Such a sheet may be interposed between a source of light and a revolving fan, which revolves by reason of a heated air stream from the said lamp, or again or additionally such sheet of glass may be arranged on the opposite side of the fan to the lamp element.

In a preferred construction of imitation fire, a casing is closed at the top by means of a sheet of glass having a corrugated or irregular surface which acts as a support for lumps or broken coloured glass, coal cinders or other material to imitate an actual coal fire.

Within the casing is mounted a fan adapted to be rotated about its axis by a rising hot air stream from a lamp acting as a source of light at the base. This fan is preferably mounted on a door swinging about vertical hinges to allow ready access to the lamp. Carried upon this door beneath the fan or alternatively carried upon a frame work permanently within the casing are arranged a plurality of glass slips having an irregular surface and arranged to form a reticulated grid. This grid may be formed by a glass element having square or other holes moulded or formed in it, the crossing bars of the grid having one or both surfaces irregular or again it may be formed of short slips of glass having an irregular surface and held together to form a grid by means of clips.

The fan may be of polished metal, and a metal reflector may be placed below or around the lamp device.

Dated this 28th day of May, 1927.

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Chartered & Registered Patent Agents.

### COMPLETE SPECIFICATION.

#### Improvements in Imitation Fires.

We, JOHN CHARLES WHITE, of 49, Bridge Street, Deansgate, Manchester, and HUBERT ASHLEY DICKINSON, of 187, Cross Street, Sale, Manchester, in the County of Lancaster, both British subjects, do hereby declare the nature of

this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The present invention relates to improvements in imitation fires usually

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known as "electric fires", "gas fires" and the like.

Various types of heat radiating devices are in general use in which radiating elements are provided for the radiation of heat energy in combination with devices such as fans rotated by upward currents of heated air from a lamp and intercepting the light therefrom previous to passage through irregularly surfaced and coloured glass or other plates to produce the semblance of a flickering coal fire.

An object of the present invention is to provide an arrangement in which the flickering will be as irregular as possible to avoid any semblance of mechanical control to the eye of an observer.

The fire according to the present invention comprises in combination a casing, a source of light, and one or more imperforated sheets of translucent glass having an irregular surface arranged in spaced relationship with one or more further imperforated sheets of glass also having an irregular surface, and with said source of light, the arrangement being such that the light passes through the spaced sheets in succession.

30 A revolving fan to produce a flicker effect may be interposed between the source of light and the sheet of glass having an irregular surface nearest to the said source of light, or may alternatively be interposed between the two sheets of glass having an irregular surface.

The invention is more particularly described with reference to the accompanying drawings in which:—

40 Fig. 1 is a sectional elevation of one suitable form of "electric fire".

Fig. 2 is a corresponding front view.

An "electric fire" comprises a casing 1 of any suitable form having electric heat radiating elements 2, 3, the casing being enclosed in front by a sheet of plain glass 4 behind which pieces of broken glass 5, which, if desired, may be coloured, are arranged and which can be held in place by means of a wire mesh work 6. The broken pieces of glass 5 may also cover in the top of the casing where they lie above a sheet or sheets of glass 7 having one or both sides irregular, so that light passing therethrough is irregularly refracted and reflected.

Within the "fire" is arranged a separate and detachable casing 8 forming a support for an electric lamp 9 and also 60 for a reflector 10 for the light from the lamp 9, which also acts as a support or pivot for a fan 11 formed with or carrying a cylindrical shroud 12, which is provided with perforations of irregular size

and irregularly disposed about its surface. Light passing from a lamp 9 either directly or after reflection by the reflector 10 is irregularly obturated by the fan blades 11, or by the shroud 12, and then passed through the glass sheets 13 closing the front of the casing, and which have one or both surfaces irregular to further refract or reflect the light, these glass sheets being in spaced relationship with the sheet or sheets of glass 7 i.e. the sheets of glass 7, 13 are so disposed that light passes through such spaced sheets in succession.

An electric fire of similar construction is described in our copending Application 31,447/25 (272362) of even date which however claims different features.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. An "imitation fire" comprising in combination a casing, a source of light, and one or more imperforated sheets of translucent glass having an irregular surface arranged in spaced relationship with one or more further imperforated sheets of glass also having an irregular surface, and with said source of light, the arrangement being such that the light passes through the spaced sheets in succession substantially as described.

2. An "imitation fire" as claimed in Claim 1 in which a rotating fan is interposed in the light stream from the said source of light, substantially as described.

3. An "imitation fire" as claimed in Claims 1 and 2 in which the fan is adapted to be rotated from the uprising stream of heated air from said source of light, substantially as described.

4. An "imitation fire" as claimed in Claims 1 and 2 in which the fan is arranged between the source of light and the sheet of glass having an irregular surface nearest to the said source of light, and in spaced relationship with these elements, substantially as described.

5. An "imitation fire" as claimed in Claim 1 in which a rotary screen having irregularly shaped and disposed perforations is arranged between the lamp and one of the sheets of translucent glass having an irregular surface and in spaced relationship with said lamp and sheet of glass, substantially as described.

Dated this 28th day of May, 1927.

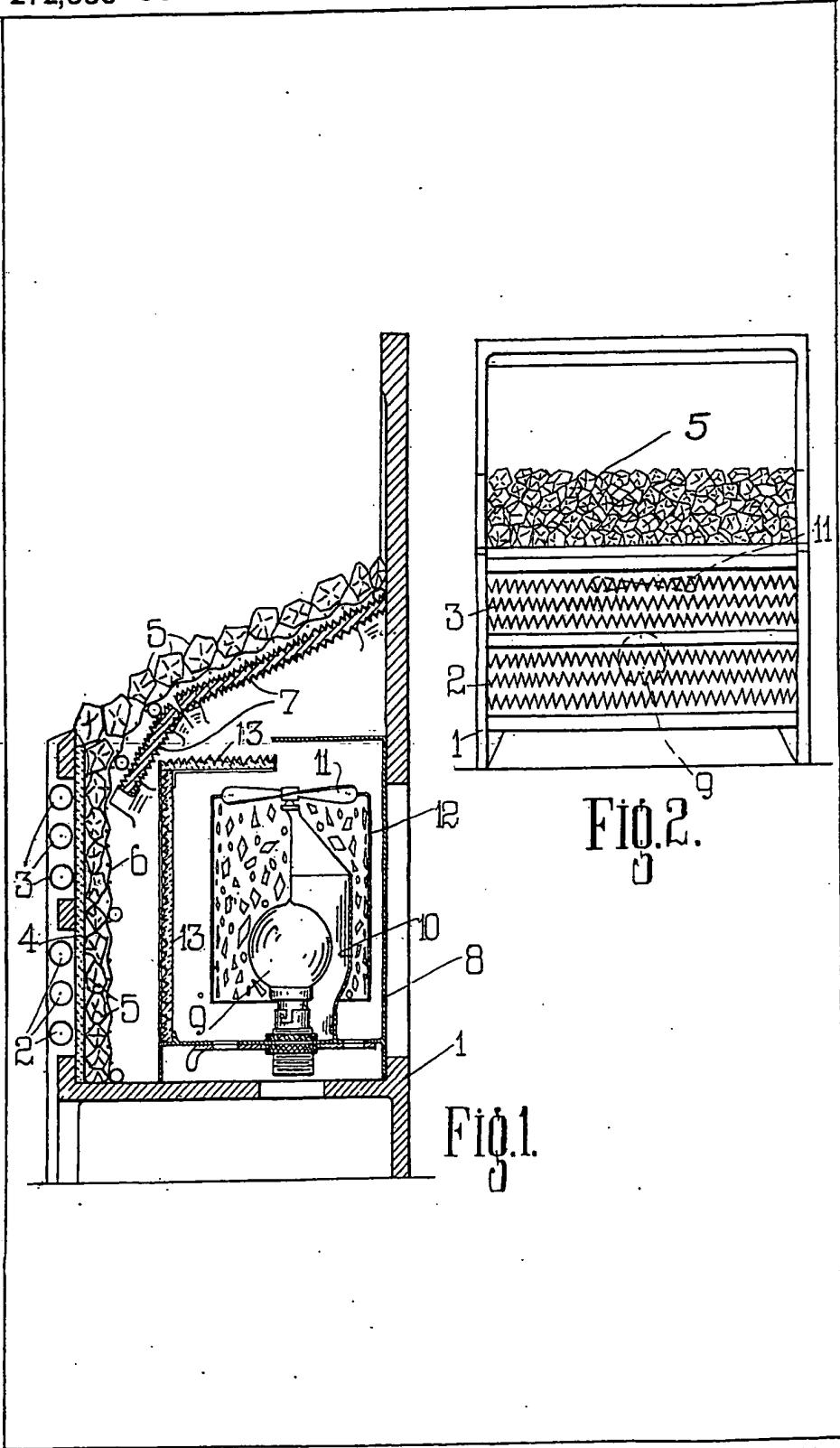
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**272,836 COMPLETE SPECIFICATION**

1 SHEET

*[This Drawing is a reproduction of the Original on a reduced scale.]*



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